AN

ESSAY

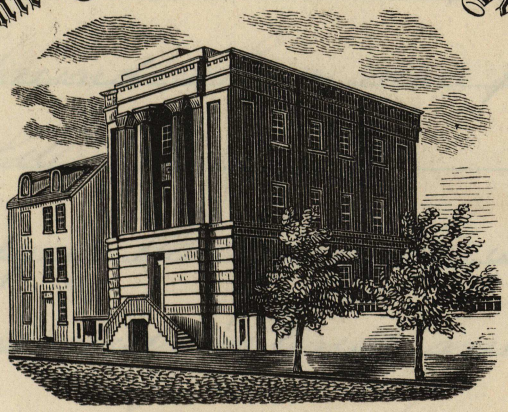
ON

Apis Mellifica,

RESPECTFULLY SUBMITTED TO THE FACULTY

of the

Homœopathic Medical College of Pennsylvania,



FOR

The Degree of Doctor of Medicine

BY

Daniel S. Starkey,

Philadelphia, February 1863.

Apis Mellifica,
or
The poison of the honey bee.

"The bee helps to heal all thy internal and external maladies, and is the best little friend whom man possesses in this world"

The study of the honey bee is fraught with pleasure and interest, and may be the source of many a practical and useful lesson. And to study it well, one must not be content to "watch it from a respectful distance", as it meanders from flower to flower, sipping the juicy nectar from their bosoms, but

provide a nuclei with a cozy little cottage, with transparent walls, yet so narrow that they can build but one grand structure (sheet) of their master masonry, and there sit and learn of "the best little friend whom man possesses in this world".

As mechanics, we find that they are unsurpassed in many points.— economy in space and material, with strength combined, they can vie with the world.— Man, with all his endowments of intellect and powers of mind, fails to excel them in mathematical exactness in these respects, and their proclivities to industry

challenge competition.

"How doth the little busy bee improve each shining hour." Had the poet watched them by night and during dreary, stormy days in their unremitting labor, he would feel with me, that he had nearly—

"Damned with faint praise."

For they labor most assiduously, during the honey gathering season at least, day and night.

The gathering of honey is but a branch of their labors. During eight months of the year they are constantly rearing the brood and nursing the young. The eggs are deposited singly into the cells by the

one mother-bee or queen; and from
that time until its perfection and
egress from the cells, they are under
the constant care of the colony. Three
days after the egg is deposited it hatches
into the larvae or worm; then it must
be furnished with food, of a proper
quality and quantity, until about the
tenth day, when it must be sealed in
its cell and there remain in "statu-quo"
until the twenty first day after the de-
posit, when it loosens its own prison
door, and emerges upon its short ca-
reer. — Short, for so it seems to be —
The average age of the worker-bee is

from six to eight months. But not so of the queen. While it takes twenty one days for the egg to be developed into a perfect workerbee, it requires only four-teen days to rear the queen. Her age is reckoned by years instead of months. four years being about the period of her existance

Though sole monarch of the realm, she rules by her presence alone. Her willing subjects do obeisance to her constantly, court her notice and sue her acceptance of their proffers.

And peace and harmony reign through-out her domain so long as her presence

is felt. But in case of her absence or death,
the queen leaves the hive voluntarily
only on two occasions; once to meet the
drones a few days after her birth and
with the issue of a swarm; upon the
first intimation of such an event the
alarm is given and instanter the whole
Kingdom presents a scene of confusion
and distress that beggars discription.
And well may they be alarmed for if
by any circumstance the queen is lost,
there remains but one means by which
they can perpetuate the existance of the
realm. If she has left one or more per-
fect eggs in their possession they will

immediately set about rearing another queen: and if no fortuitous events supervene, in fourteen days they will be joyous over the birth of another ruler.

Another branch of their labors is the building of comb. the material for which, they gather from their own bodies. It is a natural secretion. If they gorge themselves with honey or other saccharine fluids and cluster together and maintain a proper temperature, the wax is secreted and formed into very delicate scales between the folds of the abdomen.

Evans has so beautifully discribed the "modus operandi" of building comb that

I deem it not ill advised to transcribe from him.

"Thus, filtered through yon flutterer's folded mail,
Clings the cooled wax, and hardens to a scale.
Swift, at the well known call, the ready train
(For not a bee born Nature breathes in vain)
Spring to each falling flake, and bear along
Their glassy burdens to the builder throng.
These with sharp sickle, or with sharper tooth,
Pare each excrescence, and each angle smooth.
Till now, in finish'd pride, two radiant rows
Of snow white cells one mutual base disclose.
Six shining panels gird each polish'd round;
The doors fine trim, with waxen pillar bound;
While walls so thin, with sister walls combined,

Weak in themselves, a sure dependence find".

Until quite modern times, honey was almost the only sweet of the land, which shows the important relation the bee has held to the human family, in the way of luxury and comfort. But now it holds a far more important relation to man — to suffering humanity.

The honey bee was created, not merely to store up its delicious nectar for its own use and to gratify our palates, but it converts a portion of it into a virulent poison; yet when timely administered to man, it proves to be "the balm of a thousand flowers"

The effects of a "home thrust" from that life-sustaining spear, that Nature has provided it with—as a means of defence, and upon which the nerves of many "brave as a soldier" have given way,—proves to be one of our great blessings.

I say effects, for it is not the mechanical weapon that produces those serious results, but an accompanying virus, that by the aid of this instrument, is introduced into the system. Every worker bee is armed with one of these formidable weapons, at the posterior extremity of its body. At its roots are located two glands which secrete and eject a

venemous fluid, which traverses a groove
in the sting whenever it is thrust out,
and by this means it is inoculated into
the unfortunate being attacked.

The first action of this virus upon
man, when thus inoculated, is quite
uniform in character, yet very varied
in intensity: depending much upon
the susceptability and idiosincracies
of persons. — One of its universal char-
acteristics is, swelling, the extent of which
depends much upon the locality of the
wound. A single sting upon the eye-
lid which occured under my observa-
tion, caused such severe swelling as to

completely disfigure the whole face.

In the early - inflamatory - Stage, it often bears a Striking resemblance to erysipelas. In one case that came under my care, two M. D's. and very good diagnosticians, declared it to be "genuine erysipelas, probably resulting from a Scrofulous diathesis."

By witnessing the effects of these inoculations of Apis, I was induced to try its internal administration in diseases presenting like sensible Signs, and the results were very pleasing. I never exhibited Apis in an erysipelas affection without happy

results. And so imbued have I
became with its efficacy that I am
led to believe that almost, if not all
curable cases of this disease may be
cured by Apis, with Aconite and
Belladonna as adjuncts.

In its subacute, or second stage,
it appears so analogous to Anisaca,
as to readily suggest its specific
power in that disease. On one occa-
sion I was stung upon the upper
lid of the eye: the whole tissue around
the eye became enormously swollen and
was accompanied with much stinging,
burning pain and bruised soreness,

After the inflamation had reached its ultimatum and the fever had subsided, there remained an edematous swelling, of a decided watery appearance, so much so, that I attempted to relieve it by puncturing it. Supposing that it would readily reduce the tumifaction. But much to my chagrin, I found I had inflicted much pain upon myself, and totally failed in my object. The swelling gradually left the eyelids and gradually passed down the cheek, retaining much of the watery appearance for several days. This suggested the applicability

of Apis for dropsy:- And I immediately administered it to a child, whose dropsy appeared as a sequale to Scarlatina, and the result was was a complete cure and very rapidly.

In the Summer of 1860. I prescribed for forty one cases of dysentery. I had just been reading Dr Wolfs work upon Apis, and I prescribed according to his formula. I gave Aconite and Apis in alternation, taking good care to discontinue the medicines as soon as an ameliorating effect was manifest. The result was

very encouraging and I continued to administer them in every case of the Kind that came under my care, during the epidemic, and in only two cases did I find it necessary to resort to any other remedy to perform the cure. And the partial failure in those cases, I attributed to an injudicious exhibition, not of the proper remedy, but an improper quantity and frequency.

Also, in diarrhoea, in its multiform phases, I have found Apis an invaluable agent. Having not unfrequently completely arrested the disease with

a Single dose of it.

During the past Summer I visited an encampment of Soldiers where Cholera morbus with dysenteric symptoms was prevailing considerably. I prescribed Aconite and Apis for them so long as the small stock I had at hand would permit, which numbered some twelve cases: and in eleven of them the result was efficient, and to the sufferers it seemed quite magical.

In the few cases of typhus abdominalis that have come under my care I have found Apis a very excellent adjutant to Gelsemium and

toy, In Gonorrhoea it is often very efficacious; again showing its wonderful power upon the mucous membrane, And in many of the urinary and uterine diseases it is among the first remedies to be exhibited.

For Furuncles and Carbuncles this proves to be an invaluable remedy, in conjunction with Sulphur. It speedily arrests the pain, promotes Suppuration, effects the discharge of the decayed tissue and a rapid cure follows.

In Hydrocephalus, specially of children, this remedy will be long

hold a position in the front ranks of the list by which it is to be combated.

Of its effects in Dysphonia I trust we shall soon be favored with a communication, giving its virtues upon this virulent disease, for it promises much in that direction.

Among the peculiar characteristics of Apis, are:- genuine blood discharged from the breasts in lactation. Scanty and profuse secretion of the Kidneys, in alternation. Marked stinging pains in affected parts: burning hot fever and sudden perspiration in alternation and the

paroxysms are of short duration.

My mode of obtaining the apis and preparing it for medicinal use is as follows.

I provide myself with a pair of forceps and a delicate pair of scissors; also an open mouthed jar, with an ounce of Sacharum-lactis. Thus equipt I station myself by a hive of bees and carefully catch a bee, then gently press its body until the sting is well protruded, when I suddenly kill the bee and then with the scissors separate the sting, with the glands attached, from the animal, and drop it into the jar. In this

may I proceed until I have gathered thirty of the formidable weapons, - taking good care to keep them free from any exudation, in consequence of jambing or crushing of the bees. I then triturate the two together for half an hour. This I designate as the first trituration; and from this I obtain the third in accordance with the usual formula, as high as the six attenuation.

Although this mode requires much more labor than the more common one, of alcoholic preparation, yet it well repays for the care and labor bestowed, in its superior action - for the

alcohol destroys a considerable portion of its medicinal qualities; whereas in the triturations we retain them unimpaired.

Respectfully Submitted to the Faculty of the Homœopathic Medical College of Pa. For the Degree of Doctor of Medicine BY Thomas F. Stump M.D. Of Stoughton Mass. Philadelphia Feb. 1st 1863